This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1.   (original) A method that gives the perception of a display with a full range of color from a matrix of optical elements of a first or a second color, comprising

providing a two-color display of optical elements of a first color and a second color and being arranged in an alternating pattern,

determining, for an image presented on a full color display, the relative brightness for points of the image produced by the full color display, and

translating the relative brightness of the points created by the full color display into a corresponding brightness for the respective points on the two-color display.

2.   (original) A method according to claim 1, wherein the step of translating includes mapping a three dimensional coordinate representative of the relative brightness of a point to a two dimensional point.

3.   (original) A method according to claim 1, including generating a flashing period representative of a timing pattern for flashing the two-color display.

4.   (original) A method according to claim 1, wherein flashing the two-color display includes alternating the display at the flashing period between the image presented in the first and the second color.

5.   (original) A method according to claim 4, including varying the flashing period.

6.   (currently amended) A method according to claim 1, wherein the step of translating includes ~~translating the relative brightnesses~~ adding the relative brightness of a third color of a point in a ~~red-green-blue~~ three color image to a relative ~~brightnesses~~ brightness of the first color of a two-dimensional point of the first and the second color.

7.   (original) A method according to claim 1, wherein the full color display includes red, green and blue emitters, and wherein the step of translating includes

summing the brightness for a three color red element with half the brightness of the three color green emitter to determine the relative brightness for the two-color first color emitter, and

summing the brightness for a three color blue element with half the brightness of the three color green emitter to determine the relative brightness for the two-color second color emitter.

8.   (original) A method according to claim 7, including generating a noise signal, and

summing the noise signal with the relative brightness for the two-color of the first and/or the second color emitter.

9.   (original) A method according to claim 1, including the further step of providing a video driver for driving a video display as a function of the translated relative brightness of points for a two-color display.

10.   (original) A method according to claim 1, wherein the optical elements comprise light emitting diodes.

11.   (original) A method according to claim 1, wherein the optical elements comprise filters.

12.   (original) A method for creating the perception of a display with a full range of colors from a matrix of optical elements of a first or a second color, comprising

providing a two-color display of optical elements of a first and a second color arranged in an alternating pattern,

determining for an image presented on a three color display, the relative brightness for each point of the image produced by the three color display,

translating the relative brightness of each point created by the three color display into a corresponding brightness for the respective points on the two-color display, and

sequentially activating optical elements of the first and the second color, for simulating the effect of a full color display.

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13.   (original) An apparatus for visually displaying information on a two-color display, comprising

a display having two-color elements,

a memory device for storing information representative of a plurality of points for making up the image, each point being associated with information representative of three color components, and

a process for translating the relative brightness of the three color components to relative brightness levels for the two-color elements of the display.

14.   (original) An apparatus according to claim 13, further comprising a server system for executing the translation process and for delivering to the display having two color elements information representative of an image.

15.   (original) An apparatus according to claim 13, further including

a timer for periodically flashing the display.

16.   (original) An apparatus according to claim 13, further including

a noise generator for generating a noise signal having two-color components and for delivering the noise signal to the video driver process for processing the noise signal with the three color components of the image.

17.   (original) An apparatus according to claim 16 including a dynamically changing filter for introducing variation into the translation of the relative brightness of the three color components to relative brightness for the two-color elements.

18.   (original) An apparatus according to claim 13, wherein the process includes

a process for summing the brightness for a first one of the three color components with half the brightness of a second one of the three color components to determine the relative brightness for a first color component of the display, and

summing the brightness for a third color component with half the brightness of the second color component to determine the relative brightness for the second color component of the display.

4

19.   (currently amended) An apparatus according to claim 13, wherein the process includes

a process for determining the long wavelength component of a two color display by multiplying the [[number s]] numbers representative of relative brightness of three colors in a three color display by values representative of the effect of a longwave pass filter, and summing the generated numbers to provide the relative brightness of that point in the long wave component of the two color display, and

a process for determining the short wavelength component of a two color display by multiplying the [[number s]] numbers representative of relative brightness of three colors in a three color display by values representative of the effect of a shortwave pass filter, and summing the generated numbers to provide the relative brightness of that point in the short wave component of the two color display.

20.   (original) An apparatus according to claim 13, further comprising a border having a color that is the combination of the first and the second colors or the two color display and being arranged substantially around the periphery of the display.

21.   (original) An apparatus to claim 20, wherein the border comprises part of the image displayed to the user.

22.   (original) An apparatus according to claim 20, wherein the border comprises colored border formed as an edge around the two-color display.

23.   (original) An apparatus according to claim 20, wherein the border comprises a yellow border of spectral yellow or yellow formed from red-green components.

24.   (currently amended) An apparatus according to claim 13, wherein the two-color display [[include]] includes a display selected from the group consisting of an LED display, [[and]] LCD display, a light emitting polymer display and a CRT display.

5